

REMARKS

As of the Office Action of May 9, 2006, claims 1-16 were presented for examination, claims 17-23 having been withdrawn. Claims 1, 2, 5-12 and 15 were rejected and the remaining claims were indicated to be allowable if rewritten in independent form. In light of the amendment to claim 1, above, and the argument which follows, Applicant defers rewriting any of those "objected to" claims. Herein, claim 1 is amended; no new claims are added and no claims are canceled. Reconsideration is requested.

The Specification

As requested by the Examiner, the disclosure has been carefully reviewed for grammatical, idiomatic, spelling and other minor errors. As a result, a variety of corrections of such natures are made to the specification.

Claims Rejections – 35 U.S.C. §102

Claims 1, 2, 5 and 15 have been rejected under 35 U.S.C. §102(b) as anticipated by Ganesan et al. '653. In response, claim 1 has been amended to recite that the enhanced ΔV_{be} is generated as a "PTAT voltage across a single resistor coupled between the output of the amplifier and a reference potential." In Ganesan et al., although an enhanced V_{be} is generated across a resistor, such resistor is not at the output of the amplifier. It is provided within the circuit, with the voltage generated then being reflected, using a current mirror arrangement, to the output. Thus, the output is dependent on the characteristics of the mirror. The present invention avoids the requirement for use of a mirror. As stated in the Summary, on page 5, lines 12-16, the use of a single resistor at the output is advantageous in that errors due to amplification of the offset of the amplifier are obviated. Further, by using a single resistor, the errors due to multiple resistor mismatches are eliminated.

Accordingly, claim 1 and dependent claims 2, 5 and 15 are not anticipated. The rejection therefore should be withdrawn.

Claim Rejections – 35 U.S.C. §103

Claims 6-12 have been rejected under 35 U.S.C. §103(a) as unpatentable over Ganesan et al. However, these are all dependent claims and it would not have been obvious to modify Ganesan et al. (1) to obtain the subject matter of claim 1 and then (2) to obtain the subject matter of these claims. As a threshold requirement, it would be necessary to be obvious to modify Ganesan et al. to generate the ΔV_{be} across a resistor at the output of the amplifier, per claim 1. It is not. The ΔV_{be} generated by Ganesan et al. requires the stacking arrangement of transistors described therein at, for example, column 3, lines 5-25, wherein each stack is effectively coupled to either end of the resistor. Thus, it would not be possible in the context of the Ganesan et al. circuit to move this resistor to the output of the amplifier and to generate the ΔV_{be} there. It simply would not function. Neither has the Examiner even suggested a motivation for such a modification. Since it would not have been obvious to modify Ganesan et al. to obtain the invention defined in amended claim 1, perforce it would not have been obvious to modify Ganesan et al. to achieve the invention of dependent claims 6-12. The rejection therefore should be withdrawn.

Relationship of Amended to Restricted Claims and New Claims

In amending claim 1, Applicant has incorporated into claim 1 a feature previously found in claim 17, the development of the PTAT voltage by a current through a single resistor provided at the output of the amplifier. However, claim 1 has other limitations that were not present in claim 17. Accordingly, this amendment is not barred by the previous election of claims 1-16.

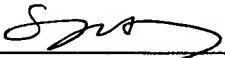
In view of the above amendment, the application now is in condition for allowance.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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